

AUGUST 11, 2020

Vaccines and Autism—Is the Science Really Settled?

By JB Handley

Let's be clear: the work of science has nothing whatever to do with consensus. Consensus is the business of politics. Science, on the contrary, requires only one investigator who happens to be right, which means that he or she has results that are verifiable by reference to the real world. In science consensus is irrelevant. What is relevant is reproducible results. The greatest scientists in history are great precisely because they broke with the consensus.

—Michael Crichton, M.D., best-selling author

Very few people in the world have read every single published study purporting to show that vaccines don't cause autism. I happen to be one of them. Not since President George W. Bush stood on the aircraft carrier USS Abraham Lincoln in 2003 to declare "mission accomplished" about the war in Iraq (right before it descended into a decade of chaotic hell) has so little evidence actually been marshaled to support a declaration that a critical question has been asked and answered—or, in this case, that the science is settled.



Maybe not?

The "Tobacco Playbook"—more on this shortly—is alive and well, and it's been both perfected and expanded in the fight to obfuscate the truth about vaccines and autism through the propagation of what's called "distracting research" and, whenever necessary, outright lies about the science that's been published exploring this topic. What's actually true?

Almost no science has actually been done, and what little has been completed has been done with a singular focus: exonerate vaccines.

Again and again and again. Baffled. Debunked. Exasperated.

Feigned Exasperation by Vaccine Spokespeople

Perhaps not surprising, but still a bit breathtaking, are the backgrounds of the two most public spokespeople for the “science is settled” side of the vaccine-autism debate. The aforementioned Dr. Paul Offit of the Children’s Hospital of Philadelphia (“CHOP”) and Dr. Peter Hotez of Baylor University share something else besides their exuberance that vaccines are innocent: They’re both patent holders for vaccines and owe their careers to the vaccine industry. In Dr. Offit’s case, his rotavirus vaccine patent has already been parlayed into a small fortune.



Dr. Paul Offit

When it comes to any discussion of vaccine-autism science, Drs. Offit and Hotez both take the tone in public interviews that it’s silly to even ask the question, because the science has been done so many times, you must be sort of stupid if you still feel the need to talk about it. As one example, in early 2017 actor Robert De Niro publicly raised the question about vaccines triggering his own son’s autism, and Dr. Offit was there to quickly admonish him, stating on NBC News, “It’s been answered again and again and again.”



Dr. Peter Hotez

Soon after, Robert F. Kennedy Jr. held a press conference alongside Robert De Niro, and Dr. Hotez was immediately quoted on the pharma-friendly new site Vox, saying, “I’m a bit baffled as to why Bobby Kennedy focuses on vaccines and autism, which has been debunked, instead of focusing on the known risks and demanding more research and studies.” Again and again and

again. Baffled. Debunked. Exasperated. This is the strategy for how the vaccine industry is now approaching the vaccine-autism link, by feigning extreme exasperation, despite the fact that very little relevant science has ever taken an honest

look into the possible role of vaccines in the explosion of autism.

One Vaccine and One Ingredient Studied

The most shocking thing about all these studies that make Drs. Offit and Hotez so

TABLE 1. Recommended schedule for active immunization of normal infants and children (See individual ACIP recommendations for details.)

Recommended age*	Vaccine(s)†	Comments
2 mo.	DTP-1,§ OPV-1¶	Can be given earlier in areas of high endemicity
4 mo.	DTP-2, OPV-2	6-wks-2-mo. interval desired between OPV doses to avoid interference
6 mo.	DTP-3	An additional dose of OPV at this time is optional for use in areas with a high risk of polio exposure
15 mo.**	MMR††	
18 mo.**	DTP-4, OPV-3	Completion of primary series
4-6 yr.§§	DTP-5, OPV-4	Preferably at or before school entry
14-16 yr.	Td¶¶	Repeat every 10 years throughout life

*These recommended ages should not be construed as absolute, i.e. 2 mos. can be 6-10 weeks, etc.
†For all products used, consult manufacturer's package enclosure for instructions for storage, handling, and administration. Immunobiologics prepared by different manufacturers may vary, and those of the same manufacturer may change from time to time. The package insert should be followed for a specific product.
§DTP—Diphtheria and tetanus toxoids and pertussis vaccine.
¶OPV—Oral, attenuated poliovirus vaccine contains poliovirus types 1, 2, and 3.
**Simultaneous administration of MMR, DTP, and OPV is appropriate for patients whose compliance with medical care recommendations cannot be assured.
††MMR—Live measles, mumps, and rubella viruses in a combined vaccine (see text for discussion of single vaccines versus combination).
§§Up to the seventh birthday.
¶¶Td—Adult tetanus toxoid and diphtheria toxoid in combination, which contains the same dose of tetanus toxoid as DTP or DT and a reduced dose of diphtheria toxoid.

1983 childhood immunization schedule

1983 Vaccine Schedule

exasperated is that for all the griping that vaccines have been studied, in fact only one vaccine and one vaccine ingredient have actually ever been scientifically explored. Let me explain.

Remember that in 1962 the maximum number of vaccines a child would receive by age five was three. In 1983 the maximum number of vaccines a child would receive by age five was ten. Today that number is thirty-eight, which is nearly quadruple what it was in 1983 and more than twelve times what it was in 1962.

Today by the time a child is five years old, if his parents follow the CDC's recommended schedule, he will have received the following vaccines, with most being given three to four separate times: (1) hepatitis B, (2) rotavirus, (3) DTP, (4) Hib, (5) pneumococcal, (6) polio, (7) flu, (8) MMR, (9) varicella, (10) hepatitis A, (11) meningococcal (only for certain groups), and (12) HPV (teenagers)

Today at his two-month-old "well baby" visit, the average American infant will receive six separate vaccines in about fifteen minutes: hepatitis B, rotavirus, DTaP, Hib,

pneumococcal, and polio. Two months later, at four months of age, most American children will again receive the same six vaccines, all administered at the same time: hepatitis B, rotavirus, DTaP, Hib, pneumococcal, and polio. Two months later, at six months of age, most American children then receive seven vaccines, all administered at the same time: hepatitis B, rotavirus, DTaP, Hib, pneumococcal, polio, and flu. By six months of age most American children receive nineteen vaccines in three visits to the doctor. Many kids also receive a birth dose of hepatitis B, boosting this number to twenty vaccines.

So of the first twenty vaccines given to American babies, how many have been studied for their relationship to autism?

None. That's right, because only one vaccine, the MMR, has ever been studied for its relationship to autism. The MMR is a vaccine first administered to American children at thirteen months of age. But what about the two-month, four-month, and six-month "well baby" visits during which children receive so many vaccines? The truth is none of those vaccines have ever been studied or considered for their relationship to autism, so no one has any idea. This would be like trying to identify the source of a plane crash, suspecting mechanical failure, solely analyzing one of the wings, and then declaring the entire airplane free of culpability.

Vaccine Ingredients (Present in 2 or more vaccines)	Vaccines: 0-18 months (United States)	
2-Phenoxyethanol	Pregnancy	Flu
Aluminum potassium sulfate		DTaP
Aluminum hydroxide		
Amino acids	Birth	Hep B
Ammonium sulfate		
Antibiotics	2 months	Hep B
Bovine components		Rotavirus
Bovine serum albumin		DTaP
Chick embryo cell culture		Hib
Culture, human embryonic		PCV
Detergent		IPV
Dextrose		
Enzymes	4 months	Hep B
Ethanol		Rotavirus
Formaldehyde		DTaP
Gelatin, hydrolyzed gelatin		Hib
Glutaraldehyde		PCV
Human components		IPV
Lactalbumin hydrolysate		
Medium 199	6 months	Hep B
Mineral salts		Rotavirus
Monosodium l-glutamate		DTaP
Phenol		Hib
Phosphate		PCV
Polymyxin B sulfate		IPV
Polysorbate-80		Flu
Potassium aluminum sulfate		
Potassium chloride	12-18 months	Flu
Potassium phosphate monobasic		Hib
Sodium borate		PCV
Sodium chloride		MMR
Sodium phosphate dibasic		Varicella
Sorbitol		Hep A
Soy peptone		DTaP
Sucrose		Flu
Thimerosal		Hep A
Vero (monkey kidney) cells)		

If I'm looking for scientific evidence of what happened to my son, I only have the science of one ingredient (thimerosal) and one vaccine (MMR) to consider.

Figure 3.1. Vaccine-Autism Science: What's Been Studied? Data from Centers for Disease Control and Prevention.

Separate from looking at one vaccine (the MMR), studies have also been published looking at a single ingredient within vaccines—thimerosal—a vaccine preservative comprised of ethylmercury. According to the CDC, there are thirty-eight separate ingredients present in two or more vaccines on the American schedule. While it certainly made sense to start the search by looking at thimerosal, given that it contains a known neurotoxin, that still leaves thirty-seven ingredients that have never been analyzed. David Kirby, former *New York Times* investigative journalist and the award-winning author of *Evidence of Harm*, is the only journalist I have seen who actually understands the extreme limitations of the completed science, and here's how he explains it:

To begin with, it is unscientific and perilously misleading for anyone to assert that “vaccines and autism” have been studied and that no link has been found. That’s because the 16 or so studies constantly cited by critics of the hypothesis have examined just one vaccine and one vaccine ingredient. . . . It is illogical to exonerate all vaccines, all vaccine ingredients, and the total US vaccine program as a whole, based solely on a handful of epidemiological studies of just one vaccine and one vaccine ingredient. It is akin to claiming that every form of animal protein is beneficial to people, when all you have studied is fish.

Here’s a complete list of every vaccine American children receive. I’ve bolded the one that has been studied for its relationship to autism: hepatitis B, rotavirus, DTaP, Hib, pneumococcal, polio, flu, **MMR**, varicella, hepatitis A, meningococcal, and HPV (teenagers).

And here are all thirty-eight vaccine ingredients. Once again I’ve bolded the one that has been studied for its relationship to autism: 2-Phenoxyethanol, albumin, aluminum hydroxide, aluminum potassium sulfate, amino acids, ammonium sulfate, antibiotics, bovine components, bovine serum, chick embryo cell culture, culture, detergent, dextrose, enzymes, formaldehyde, gelatin, glutaraldehyde, human components, human embryonic cells, lactalbumin hydrolysate, medium 199, mineral salts, monosodium l-glutamate, phenol, phosphate, polymixin B sulfate, polysorbate-80, potassium aluminum sulfate, potassium chloride, potassium phosphate monobasic, sodium borate, sodium chloride, sodium phosphate dibasic, sorbitol, soy peptone, sucrose, **thimerosal**, vero (monkey kidney) cells, and yeast protein.

Do you really think it’s reasonable to say, “Case closed; we’ve studied vaccines and autism”

Twenty-Seven Studies and All the Wrong Questions

The Autism Science Foundation (ASF) serves as a repository for the “asked and answered” question about vaccines and autism and also as a platform for Dr. Offit of CHOP, who sits on the board of the organization and speaks on their behalf. The organization’s website cites twenty-seven studies that they assert prove that “vaccines and autism” are unrelated. Thirteen of the studies look at the thimerosal-autism relationship. Ten of the studies look at the MMR-autism relationship. And four of the studies are “meta-analyses” of

the aforementioned twenty-three thimerosal and MMR studies. That's it. **One vaccine, one ingredient.**

None of the twenty-seven studies cited by the ASF used to "prove" vaccines don't cause autism have come close to asking the right questions about cause and effect or have even considered the proper control group (fully unvaccinated children) to get to an answer. Having spent the time to critically read every study produced to "prove" vaccines don't cause autism, I'm dumbfounded by their inadequacy. And the comments public officials make about these studies are even more absurd and unsupportable. To help you understand what I mean, let's review the actual questions asked by three of the most common studies cited to "prove" that "vaccines don't cause autism."

Wrong Question #1: Do children who received more thimerosal in their vaccines have different neurological outcomes from children who received less thimerosal in their vaccines? This study, published in Pediatrics in 2000 and commonly called the "Verstraeten study," effectively compared two-pack-a-day smokers to one-pack-a-day smokers, looking at children who received more mercury in their vaccines to children who received slightly less mercury in their vaccines, to see if there were any differences in a variety of neurological disorders. This is arguably the signature study of the "vaccines don't cause autism" crowd, which makes a careful reading of the study so bewildering. The study, "Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Databases," reached a conclusion that everyone seems to have forgotten; namely, the study authors could neither prove nor disprove an association between mercury and vaccines, stating:

"The biological plausibility of the small doses of ethylmercury present in vaccines leading to increased risks of neurodevelopmental disorders is uncertain."

This is a very instructive and important study to scrutinize for many reasons. First, this was the first study ever done to explore any link between vaccines and autism, albeit the exploration was solely to see whether more or less mercury might impact the autism rate. When the study was published, the vaccine industry PR machine went into overdrive, declaring that a new study in Pediatrics had proven vaccines don't cause autism. In fact, the study author was so irked by the way his findings were being misinterpreted that he took the extraordinary step of

penning a letter to *Pediatrics* to complain. Dr. Thomas Verstraeten, the study author, wrote this letter right before he left his position at the CDC to take a job with vaccine maker GlaxoSmithKline in Belgium:

Surprisingly, however, the study is being interpreted now as negative [where “negative” implies no association was shown between thimerosal and autism] by many. . . . The article does not state that we found evidence against an association, as a negative study would. It does state, on the contrary, that additional study is recommended, which is the conclusion to which a neutral study must come. . . . A neutral study carries a very distinct message: the investigators could neither confirm nor exclude an association, and therefore more study is required.

It's hard to understate how irresponsible and inaccurate it is that people like Dr. Paul Offit and Dr. Peter Hotez still routinely cite this study as “proof” vaccines don't cause autism, since the study only considered mercury level exposure in fully vaccinated kids, reached a neutral outcome, and recommended more work needed to be done. Even crazier, the study did find that “tics” (a motor disorder) are in fact correlated to mercury levels, writing that “cumulative exposure at 3 months resulted in a significant positive association with tics.”

Wrong Question #2: Are autism rates different for children who received 62.5 mcg or 137.5 mcg of ethylmercury? Published in 2009, also in *Pediatrics*, this study from Italy was released with great fanfare and is commonly called the “Tozzi study.” The Associated Press headline shouted, “Study Adds to Evidence of Vaccine Safety” and the editor-in-chief of *Pediatrics*, Dr. Lewis First, included a note to pediatricians advising that “you'll want to know this information when talking with parents of your patients about the safety and benefits of vaccines.”

What's bizarre is that eight years after the Verstraeten study above, the Tozzi study utilized the exact same trick, looking at children who received more mercury in their shots and less mercury in their shots to see if there was any difference in neurological outcomes. Even more mystifying, the Tozzi study had a sample of children with a miniscule autism rate; as the study authors explained, “We detected, through the telephone interviews with parents and reviews of medical charts, 1 case of autism among the 856 children in the lower thimerosal intake group and no cases among the 848 children in the higher thimerosal intake group.” So in their

sample the rate of autism of the children analyzed was 1 in 1,704 (the US rate is 1 in 36, approximately 47 times higher than the sample rate) meaning this data is both suspect and useless.

Another Italian doctor, Dr. Vincenzo Miranda, offered up a stunning rebuke of the Tozzi study, agreeing with the abject uselessness of the data:



Dr. Alberto Tozzi

This study is not methodologically correct. The study by Tozzi and others has many limitations. No comparison is done with children not exposed to thimerosal and neuropsychological disturbances are studied in recruiting voluntary [sic] all children even healthy ones, without assessing the sensitivity individual mercury. With this background this study cannot lead to any conclusion.

Let's pause here for one moment. I have just walked you through two of the signature studies held up by the spokespeople for the vaccine industry who claim "vaccines don't cause autism," despite the fact that neither study gets anywhere near exploring that actual topic of whether vaccines are causing autism. The PR machine for these studies is something to behold. Pediatrics, the scientific journal of the American Academy of Pediatrics, publishes these studies, and on the day they are released, every major news organization in the country reports on the studies, and every article sends the same basic message: Vaccines are safe, and they don't cause autism.

By the way, guess who funded these first two studies? If you guessed the CDC, you're right. The federal agency that's responsible for implementing the vaccine program is also responsible for safety monitoring, and they also sponsor studies that don't look at the vaccine-autism connection in any honest way, and then they support the promotion of the studies where doctors and scientists lie about what the studies actually did and what conclusions they actually reached.

Wrong Question #3: Are autism rates higher among the younger siblings of children with autism if they receive the MMR vaccine? It's no exaggeration to say that this 2015 study—"Autism Occurrence by MMR Vaccine Status among

US Children with Older Siblings with and without Autism”—is the most hyped study I've ever seen, with every mainstream media outlet running a story to say that the MMR-autism hypothesis had been conclusively disproven. In a novel approach, the study authors focused their analysis on children who had an older sibling with autism or without. In a more novel approach, the study authors chose to use the word “unvaccinated” to describe any child in the study who hadn't received the MMR vaccine. What they failed to clarify for anyone not reading the details was that “unvaccinated” could also mean, and often did mean, that the child had gotten every vaccine except the MMR. In other words, the authors blatantly misused the word “unvaccinated,” and the press ate it up. Even more shocking was the prerelease publicity page from the *Journal of the American Medical Association*, where the study was published. To help reporters get ready to write a story, they included some quotes from some “third parties” discussing the findings. Here's an important quote they provide from Dr. Bryan King of the University of Washington:

Taken together, some dozen studies have now shown that the age of onset of ASD does not differ between vaccinated and unvaccinated children, the severity or course of ASD does not differ between vaccinated and unvaccinated children, and now the risk of ASD recurrence in families does not differ between vaccinated and unvaccinated children.

What's absolutely, positively mystifying about this quote, a quote you can find on the website of the journal that published this study, is that it's 100 percent false. There have never been any studies comparing vaccinated to unvaccinated kids until very recently, which is the holy grail study that needs to be done, and which I will discuss at length in one moment. Furthermore, it was never mentioned that this study was actually written by researchers imbedded inside a large PR/consulting firm called The Lewin Group, which counts the largest vaccine makers in the world as its clients.

I'm not going to bore you with too many more details about this study, but I will with one, which is the number of total kids in the study, a number that's been bandied about impressively. This study was heralded as being a “large” study of “unvaccinated” kids. I've already shown you that the “unvaccinated” part of that claim was untrue, and so was the “large” part. Yes, the study authors started with over ninety-five thousand kids, and this was certainly the number used

everywhere in the media. But the power of this study was in looking at younger siblings who had an older sibling with autism. This group is considerably more “at risk” for autism, and it’s therefore their outcome that was of interest to the study authors.

How many had an older sibling with autism, had autism themselves, and had never received the MMR? Twenty-three kids. That’s it.

The real “gem” in the study would be a child who met three separate criteria: (1) had an older sibling with autism, (2) had autism themselves, and (3) had not received the MMR vaccine. You see, if you met all three criteria, you were the proof the study authors were looking for, that MMR had not caused your autism. How many kids in this large study met the three criteria that mattered? How many had an older sibling with autism, had autism themselves, and had never received the MMR? Twenty-three kids. That’s it. Twenty-three kids is not very much to slam the door on whether or not “vaccines cause autism,” much less the actual question the study considered about MMR’s potential role in autism. And yet these twenty-three kids were the “proof” that MMR doesn’t cause autism, because they had a sibling with autism, had autism themselves, and had never received the MMR vaccine. And the rest of their vaccination status was completely unknown and never discussed.

Table 2. Unadjusted and Adjusted Relative Risk Estimates for MMR Vaccination and ASD at Ages 2 to 5 Years in Children With Older Siblings With and Without Diagnosed ASD										
MMR Status	Older Sibling Without ASD (n = 93 798)					Older Sibling With ASD (n = 1929)				
	No. of ASD Cases/Total No. ^a	Unadjusted ^b		Adjusted ^c		No. of ASD Cases/Total No. ^a	Unadjusted ^b		Adjusted ^c	
		RR (95% CI)	P Value ^d	RR (95% CI)	P Value		RR (95% CI)	P Value ^d	RR (95% CI)	P Value
Age 2 y										
1 dose	53/77 822	0.80 (0.44-1.46)	.57	0.91 (0.68-1.20)	.50	7/1394	0.44 (0.18-1.04)	.10	0.86 (0.56-1.34)	.51
Unvaccinated	13/15 249	1 [Reference]		1 [Reference]		6/520	1 [Reference]		1 [Reference]	
Age 3 y										
1 dose	239/79 666	0.86 (0.62-1.18)	.39	0.97 (0.77-1.21)	.76	38/1458	0.67 (0.42-1.04)	.03	0.56 (0.30-1.04)	.07
Unvaccinated	45/12 853	1 [Reference]		1 [Reference]		17/438	1 [Reference]		1 [Reference]	
Age 4 y										
1 dose	395/79 691	0.91 (0.70-1.18)	.53	1.03 (0.81-1.31)	.82	64/1491	0.66 (0.42-1.04)	.10	0.86 (0.56-1.34)	.51
Unvaccinated	65/11 957	1 [Reference]		1 [Reference]		25/387	1 [Reference]		1 [Reference]	
Age 5 y										
2 doses	244/45 568	0.74 (0.55-0.99)	.049	1.09 (0.76-1.54)	.65	30/796	0.44 (0.26-0.75)	.003	0.56 (0.30-1.04)	.07
1 dose	339/40 495	1.16 (0.87-1.53)	.35	1.10 (0.79-1.53)	.59	51/864	0.69 (0.43-1.11)	.16	0.92 (0.56-1.50)	.74
Unvaccinated	56/7735	1 [Reference]		1 [Reference]		23/269	1 [Reference]		1 [Reference]	

(1) had an older sibling with autism, (2) had autism themselves, and (3) had not received the MMR vaccine

(1) had an older sibling with autism, (2) had autism themselves, and (3) had not received the MMR vaccine

Only 23 kids ...

And remember, for all the different ways I can find fault with this study, particularly its misappropriation of the word “unvaccinated,” **it still only looked at a single vaccine: the MMR.**

Even the Head of the NIMH Doesn’t Get It

In mid-2017 Dr. Joshua Gordon, the newly appointed head of

the National Institute of Mental Health (NIMH), met with a number of parents from the autism community. As Dr. Gordon's biography explains, he sits in a position to have a huge impact on autism science, as he now directs the agency that is the "largest funder of research into mental illness":

He oversees an extensive research portfolio of basic and clinical research that seeks to transform the understanding and treatment of mental illnesses, paving the way for prevention, recovery, and cure.



Dr. Joshua Gordon

The parents pressed Dr. Gordon on the very issue I have raised in this post: What science was he relying on to dismiss the vaccine-autism connection? Dr. Gordon felt confident that vaccinated children had been studied versus unvaccinated children and promised he would follow up by providing evidence, and indeed he did, by sending an email on May 31 with a link to a single study titled, "Vaccines Are Not Associated with Autism: An Evidence-Based Meta-analysis of Case-Control and Cohort Studies."

When I saw the email, I was dumbfounded. Dr. Gordon, aside from chairing the NIMH, is also the chair of the Interagency Autism Coordinating Committee (IACC), a "Federal advisory committee that coordinates Federal efforts and provides advice to the Secretary of Health and Human Services on issues related to autism spectrum disorder (ASD)." In short, he's the single most important person in the US government to try to resolve the autism epidemic, and the study he provided that convinced him vaccines and autism were unrelated was based on the very trick I have already explained to you:

Every study in the meta-analysis (which is basically a study looking at a larger sample of other studies) Dr. Gordon provided to support his view that vaccines don't cause autism was either a thimerosal study or an MMR study, in all cases comparing heavily vaccinated children to heavily vaccinated children. More specifically, six of the studies looked at MMR vaccine and four of the studies looked at thimerosal. Did any studies look at any other vaccine or in any way consider the mounting biological evidence implicating vaccine adjuvants in autism that I discuss here? Did any of the studies have any sample of children who had received no vaccines? No, not even a little. One of the

parents to whom Dr. Gordon sent the email responded swiftly, making many of the same points I have made in this post:

The abstract/review article you sent me below highlights the concern raised that there has never been a study assessing the relative risk of autism between vaccinated and unvaccinated child. To be sure, this review (and its abstract) leave the impression that the studies it relies upon compare “unvaccinated” children (no vaccines) with vaccinated children. Unfortunately, this is misleading since all 10 of the underlying studies relied upon for this review compared highly vaccinated children with highly vaccinated children. The only difference typically between the study and control groups was a single MMR vaccine or thimerosal vs. non-thimerosal vaccines. (I would be happy to provide you with a breakdown of each of the 10 studies reflecting same.) Meaning, what this review considers “unvaccinated” are vaccinated children typically only missing the MMR vaccine. Assuming the control children in these studies followed the current CDC recommended vaccination schedule, they would each have received 21 vaccine injections during the first 12 months of life excluding the MMR vaccine. Hence, these studies tell us virtually nothing about the relationship of vaccines to autism because they are not comparing vaccinated and unvaccinated children.

How did Dr. Gordon respond to a pointed email, effectively dismantling his understanding of vaccine-autism science? With this curt reply:

I appreciate you following up with me, and apologize for the delay in my response. I think the information you are seeking would be best obtained from the CDC.

I have seen this time and again, even with experts like Dr. Gordon, whom I hold—reasonably, I think—to a high standard of professionalism and curiosity. They're quick to send a link to a study reinforcing their belief that vaccines and autism are unrelated but one that doesn't hold up to even a minor amount of scrutiny. And when pressed, Dr. Gordon simply chose to kick the can. This is a person who, if he wanted, could fund enough science to end the autism epidemic! It's disappointing, and disturbing. My own opinion is that people like Dr. Gordon are too scared to consider the truth and too worried about what looking for it (by funding true vaccine-autism science) might do to their careers and reputations.

What's the *Right* Question?

The three questions and three studies I shared with you above come from three of the most commonly listed studies cited as “proof” that “vaccines do not cause autism.” Yet not one of them comes close to answering the question parents of children with autism really care about, which goes something like this:

My child received thirty-eight vaccines by the time he was five, including twenty vaccines by his first birthday. Is the administration of so many vaccines causing autism in certain children?

That question, so important to the health of our children and our nation, has never been asked, so how could it be answered? Well, I should probably clarify that question, especially the part where I say “never been asked,” because the question has been asked, several times, in fact, but the answers don't suit the Dr. Offits and Dr. Hotezes of the world, so you never hear about them, but you will in a moment, after a quick digression. I want to walk you through three simple but important concepts that will help put vaccine-autism science in proper perspective:

Biological plausibility “refers to the proposal of a causal association—a relationship between a putative cause and an outcome—that is consistent with existing biological and medical knowledge.”

Encephalopathy “means disorder or disease of the brain. In modern usage, encephalopathy does not refer to a single disease, but rather to a syndrome of overall brain dysfunction; this syndrome can have many different organic and inorganic causes.”

Wisdom of crowds is the notion that “large groups of people are smarter than an elite few, no matter how brilliant—better at solving problems, fostering innovation, coming to wise decisions, even predicting the future.”

No one wants to blame the childhood vaccine schedule for the autism epidemic. Vaccines were invented to save the lives of children, not harm them, and I believe most people on both sides of this debate believe they are helping children by either fighting for more vaccines or fighting for the recognition that vaccines are causing autism in a subset of children.

But blaming vaccines for the autism epidemic is the most “biologically plausible” hypothesis. Sorry, vaccines, but it's

just true. You provide some benefits to society in reducing a portion of certain acute illnesses, but you also have a very nasty underbelly: You cause brain damage in some of the kids who receive you.

Don't take my word for it—our federal government could not be clearer that vaccines cause brain damage in some children. Time and again on their own website, the Department of Health and Human Services' National Vaccine Injury Compensation Program makes it clear that

Vaccine Injury Table		
<i>Applies Only to Petitions for Compensation Filed under the National Vaccine Injury Compensation Program on or after March 21, 2017</i>		
<small>(a) In accordance with section 312(b) of the National Childhood Vaccine Injury Act of 1986, title III of Public Law 99-660, 100 Stat. 3779 (42 U.S.C. 300aa-1 note) and section 2114(c) of the Public Health Service Act, as amended (PHS Act) (42 U.S.C. 300aa-14(c)), the following is a table of vaccines, the injuries, disabilities, illnesses, conditions, and deaths resulting from the administration of such vaccines, and the time period in which the first symptom or manifestation of onset or of the significant aggravation of such injuries, disabilities, illnesses, conditions, and deaths is to occur after vaccine administration for purposes of receiving compensation under the Program. Paragraph (b) of this section sets forth additional provisions that are not separately listed in this Table but that constitute part of it. Paragraph (c) of this section sets forth the qualifications and aids to interpretation for the terms used in the Table. Conditions and injuries that do not meet the terms of the qualifications and aids to interpretation are not within the Table. Paragraph (d) of this section sets forth a glossary of terms used in paragraph (c).</small>		
Vaccine	Illness, disability, injury or condition covered	Time period for first symptom or manifestation of onset or of significant aggravation after vaccine administration
I. Vaccines containing tetanus toxoid (e.g., DTaP, DTP, DT, Td, or TT)	A. Anaphylaxis	≤4 hours.
	B. Brachial Neuritis	2-28 days (not less than 2 days and not more than 28 days).
	C. Shoulder Injury Related to Vaccine Administration	≤48 hours.
	D. Vasovagal syncope	≤1 hour.
II. Vaccines containing whole cell pertussis bacteria, extracted or partial cell pertussis bacteria, or specific pertussis antigen(s) (e.g., DTP, DTaP, P, DTP-Hib)	A. Anaphylaxis	≤4 hours.
	B. Encephalopathy or encephalitis	≤72 hours.
	C. Shoulder Injury Related to Vaccine Administration	≤48 hours.
	D. Vasovagal syncope	≤1 hour.
III. Vaccines containing measles, mumps and rubella virus or any of its components (e.g., MMR, MM, MMRV)	A. Anaphylaxis	≤4 hours.
	B. Encephalopathy or encephalitis	5-15 days (not less than 5 days and not more than 15 days).

Vaccine Injury Table

"encephalopathy" is a vaccine injury, and they define "chronic encephalopathy" in the following way:

"Chronic Encephalopathy occurs when a change in mental or neurologic status, first manifested during the applicable time period, persists for a period of at least 6 months from the date of vaccination."

Like many children with autism, my son is suffering from a chronic encephalopathy that occurred after his vaccine appointments.

I don't really have to use that many of my IQ points to think that there may be a correlation between a product that causes brain damage (vaccines) and my son's brain damage. It would be enough, frankly, that brain damage is known to be a side effect of vaccines in some children to assert how biologically plausible the vaccine-autism connection is, but the argument is bolstered by two additional points: (1) As you now know, the number of vaccines given to children has nearly quadrupled since the early 1980s, and the autism rate is up more than 30,000 percent during the same time period.

(2) There are tens of thousands (or more) of parental reports of regression into autism after vaccination. These reports are worldwide, in every socioeconomic level and every race. The stories are remarkably consistent. The “wisdom of crowds” is taken to an extreme when it comes to the vaccine-autism connection, according to the parents, and many of their doctors, who witnessed the regression of their children firsthand.

An Embezzler and a Whistle-Blower

OIG Fugitive: Poul Thorsen

- From approximately February 2004 until February 2010, Poul Thorsen executed a scheme to steal grant money awarded by the Centers for Disease Control and Prevention (CDC). CDC had awarded grant money to Denmark for research involving infant disabilities, autism, genetic disorders, and fetal alcohol syndrome. CDC awarded the grant to fund studies of the relationship between autism and the exposure to vaccines, the relationship between cerebral palsy and infection during pregnancy, and the relationship between developmental outcomes and fetal alcohol exposure.
- Thorsen worked as a visiting scientist at CDC, Division of Birth Defects and Developmental Disabilities, before the grant was awarded.
- The initial grant was awarded to the Danish Medical Research Council. In approximately 2007, a second grant was awarded to the Danish Agency for Science, Technology, and Innovation. Both agencies are governmental agencies in Denmark. The research was done by the Aarhus University and Odense University Hospital in Denmark.
- Thorsen allegedly diverted over \$1 million of the CDC grant money to his own personal bank account. Thorsen submitted fraudulent invoices on CDC letterhead to medical facilities assisting in the research for reimbursement of work allegedly covered by the grants. The invoices were addressed to Aarhus University and Sahlgrenska University Hospital. The fact that the invoices were on CDC letterhead made it appear that CDC was requesting the money from Aarhus University and Sahlgrenska University Hospital although the bank account listed on the invoices belonged to Thorsen.
- In April 2011, Thorsen was indicted on 22 counts of Wire Fraud and Money Laundering.
- According to bank account records, Thorsen purchased a home in Atlanta, a Harley Davidson motorcycle, an Audi automobile, and a Honda SUV with funds that he received from the CDC grants.
- Thorsen is currently in Denmark and is awaiting extradition to the United States.



Fugitive from Justice

Two authors, both affiliated with the CDC, have either led or been coauthors on a total of eight of the studies that are cited by spokespeople as “proof” that vaccines don’t cause autism. One is an embezzler listed as a “Most Wanted” fugitive, and one became a whistle-blower due to scientific fraud he and his colleagues committed in one of the studies.

Poul Thorsen, a Danish researcher, has been the lead or coauthor of four of the studies routinely cited as proof vaccines don't cause autism. Mr. Thorsen is wanted by the Office of Inspector General (OIG) for embezzling funds from the CDC. According to the OIG, Mr. Thorsen "executed a scheme to steal grant money awarded by the Centers for Disease Control and Prevention (CDC)." They claim he "diverted over \$1 million of the CDC grant money to his own personal bank account. Thorsen submitted fraudulent invoices on CDC letterhead to medical facilities assisting in the research for reimbursement of work allegedly covered by the grants."

In 2011 Mr. Thorsen was indicted "on 22 counts of wire fraud and money laundering" and "according to bank account records, Thorsen purchased a home in Atlanta, a Harley Davidson motorcycle, an Audi automobile, and a Honda SUV with funds that he received from the CDC grants." The subject of all the grant money he stole? Vaccines and autism.

Dr. William Thompson, a CDC researcher, has led or coauthored four papers as well, and he issued a statement through a whistle-blower attorney that the findings in one of the MMR-autism studies for which he served as the lead author were fraudulent:

I regret that my coauthors and I omitted statistically significant information in our 2004 article published in the journal Pediatrics. The omitted data suggested that African American males who received the MMR vaccine before age 36 months were at increased risk for autism. Decisions were made regarding which findings to report after the data were collected, and I believe that the final study protocol was not followed.

Congressman Bill Posey, who privately met with Dr. Thompson, said in a congressional briefing that CDC scientists met in a private room and resolved to destroy all the primary data and notes from Dr. Thompson's MMR-autism study, which was published in Pediatrics and still quoted by many. Dr. Thompson issued the following statement about the meeting:

The co-authors scheduled a meeting to destroy documents related to the study. The remaining four co-authors all met and brought a big garbage can into the meeting room, and reviewed and went through all the hard copy documents that we had thought we should discard, and put them into a huge garbage can. However, because I assumed it was illegal and would violate both FOIA and DOJ requests, I kept hard copies of all documents in my office, and I retain all associated computer files. I believe we intentionally withheld controversial findings from the final draft of the Pediatrics paper.

An embezzler and a whistle-blower involved with eight of the crucial studies proving no link between vaccine and autism? It's hard to believe things are this shady, but they are.

SHARYL ATTKISSON
UNTOUCHABLE SUBJECTS. FEARLESS, NONPARTISAN REPORTING.

USWORLDBUSINESSHEALTHSPECIAL INVESTIGATIONS

CDC Scientist: 'We scheduled meeting to destroy vaccine-autism study documents'


DATED: JUNE 14, 2016 BY SHARYL ATTKISSON — 130 COMMENTS

[f](#) [t](#) [in](#) [v](#) [p](#)

This article was first published July 29, 2015

A current Centers for Disease Control (CDC) senior scientist has made an unprecedented admission: he and his colleagues--he says-- committed scientific misconduct to cover up a meaningful link between vaccines and autism in black boys.

Just as startling, the CDC scientist, Dr. William Thompson, says the study co-authors 'scheduled a meeting to destroy documents related to the study. The remaining four co-authors all met and brought a big garbage can into the meeting room, and reviewed and went through all the hardcopy documents that we had thought we should discard, and put them



SHARYL ATTKISSON

[Read the article.](#)

Epidemiological Science versus Biological Science

While embezzlers and whistle-blowers are fascinating, the purpose of this blog post is to explain that the science on the connection between vaccines and autism has barely scratched the surface, and anyone saying it's settled is lying. Noteworthy is that the most public liars are, of course, economically intertwined with the vaccine industry; namely, Drs. Paul Offit and Peter Hotez, who are the primary spokespeople for any mainstream media you read about vaccines and autism these days. But I'd be remiss not to mention that there is science, compelling science, that has

looked at vaccinated children versus unvaccinated children. This science has shown a devastatingly strong link between vaccines and autism, which is why you've never heard of these studies. Before I share that science with you, I want to explain two really important points.

First, all the science I have talked about so far is epidemiology. Scientists are looking at data, in this case medical records and vaccination records of children, and they're analyzing them to look for patterns and relationships. This is what they did with tobacco. They looked at smokers. They looked at nonsmokers. They looked at lung cancer rates. At some point the correlation between being a smoker and having lung cancer was so high that the connection was undeniable. Epidemiology takes all that data, finds relationships and correlations, and concludes whether any two things might be connected; for example, being vaccinated and having autism.

... we have clear biological plausibility for how, exactly, a vaccine can cause autism in a child.

But there's a different kind of science that's even more revealing. It's biological science. It's science looking at living things and how they actually respond to other things. This was also done with tobacco when researchers painted mice with tobacco tar in the 1950s and proved, biologically, that tobacco tar can cause cancer. That biological science was devastating for tobacco, and it began the process of revealing the truth about tobacco and lung cancer.

In the vaccine-autism debate, we have a growing body of biological science. It's compelling, and it's all very recent. We have mice studies in which the mice are injected with vaccine ingredients, producing devastating results. And we have clear biological plausibility for how, exactly, a vaccine can cause autism in a child. That's not the point of this post, to discuss all the biological science that has been done, but that is the point of this post, which will show you that scientists are actually very close to identifying how, exactly, a vaccine can cause autism.

Second, I want you to appreciate that most published science goes unnoticed by the public. Most scientists have no PR firm behind them, alerting the media in advance whenever a new study comes out. Most scientists don't know the first thing about PR; they have no PR budget, and that's not why they are publishing research. They do their research to advance science, and their audience is really other scientists.

Vaccine-autism science is uniquely different. The vaccine

makers do have PR budgets and PR firms, and any vaccine-autism study that shows “vaccines don’t cause autism” makes national news. Every single one, every single time. The studies that actually compare vaccinated versus unvaccinated children? They don’t make the news, because their answers implicate vaccines. They hide in plain sight, are shared widely in the autism community, and are ignored by the mainstream press.

Seven Studies of Unvaccinated Children

The first study that compared children who had received a vaccine with children who hadn’t was published in 2000. Although autism wasn’t something the study considered, it was still revealing. Titled “Effects of Diphtheria-Tetanus-Pertussis or Tetanus Vaccination on Allergies and Allergy-Related Respiratory Symptoms among Children and Adolescents in the United States,” this study from the UCLA school of public health did look specifically at the DTP vaccine to see if it might be responsible for allergies and allergy-related symptoms, such as asthma. Looking at more than thirteen thousand children, the study found that:

DTP or tetanus vaccination in US children is associated with life- time history of asthma or other allergies and allergy-related symp- toms. . . . Assuming that the estimated vaccination effect is unbiased, 50% of diagnosed asthma cases (2.93 million) in US children and adolescents would be prevented if the DTP or tetanus vaccination was not administered.

So the first study to ever compare a group that received a vaccine with a group that didn’t found a dramatic difference in rates of asthma and allergies among the vaccinated group, so much so that they thought not getting the DTP vaccine might reduce cases of asthma by 50 percent! Note that many children with autism suffer from what are known as comorbid conditions, such as asthma, allergies, and other autoimmune conditions.

In 2008 in the second study ever looking at a group of children who didn’t receive a vaccine, public health researchers Carolyn Gallagher and Melody Goodman from SUNY Stony Brook looked at the possible relationship between the hepatitis B vaccine and special education. Were children who received the full series of hepatitis B vaccines (three separate vaccines, the first one often given on day one of life) more likely to end up in special education classes than

children who didn't receive any hepatitis B vaccines? The study, "Hepatitis B Triple Series Vaccine and Developmental Disability in US Children Aged 1–9 Years," was published in the journal *Toxicological and Environmental Chemistry*, and the results were pretty clear: The full series of hepatitis B led to a ninefold greater likelihood of receiving special education:

This study found statistically significant evidence to suggest that boys in United States who were vaccinated with the triple series Hepatitis B vaccine . . . were more susceptible to developmental disability than were unvaccinated boys. . . . The odds of receiving EIS [special education] were approximately nine times as great for vaccinated boys (n = 46) as for unvaccinated boys (n = 7), after adjustment for confounders.

The same researchers from SUNY Stony Brook published another study in 2010, this time looking at the relationship between receiving the hepatitis B series and autism. Published in the prestigious *Journal of Toxicology and Environmental Health*, "Hepatitis B Vaccination of Male Neonates and Autism Diagnosis" once again reached very clear conclusions: "Boys vaccinated as neonates had threefold greater odds for autism diagnosis compared to boys never vaccinated or vaccinated after the first month of life." Journalist David Kirby appreciated the significance of the new findings, writing in the *Huffington Post*:

[The study] will be among the first university-based population studies to suggest an association between a vaccine and an increased risk for autism. And that would be in direct contradiction to all those MMR and thimerosal studies that purportedly found no such link.

The two Goodman and Gallagher articles about hepatitis B raise many concerns. I've met pediatricians who feel that the hepatitis B vaccine specifically has triggered the epidemic of neurological disorders and autoimmunity we now see in our children. Hepatitis B was the first vaccine introduced after Congress indemnified vaccine makers from liability in 1986. The vaccine has a high dose of aluminum, which you will read here is likely a primary culprit of autism, and it's often given to babies on day one of life, which many immunologists feel is a huge mistake. These two studies raise major concerns, but I'm guessing you never knew either of these studies existed, which supports my point about scientists and PR firms.

In 2017, something amazing happened. Two separate studies comparing vaccinated and completely unvaccinated children actually got published. Unlike the Goodman and Gallagher studies above, which only explored a single vaccine (the rest of a child's vaccine status was simply not considered), these two new studies met the "gold standard"—they found children who had never received any vaccines and looked at their health outcomes in a variety of ways. The public health researchers from Jackson State University originally planned to publish a single study, until they looked at the data on children born prematurely, noting that the data on the difference in health outcomes for vaccinated versus unvaccinated premature infants was so dramatic it deserved its own study.

Published in the *Journal of Translational Science*, the first groundbreaking study was called, "Pilot Comparative Study on the Health of Vaccinated and Unvaccinated 6- to 12-Year-Old U.S. Children," and its results were so devastating to the US vaccine program that there wasn't a single media outlet in the country that covered its release. The results of comparing vaccinated children to completely unvaccinated children were no surprise to me, my wife, or any of the autism parents I know, but perhaps would surprise others:

The vaccinated were less likely than the unvaccinated to have been diagnosed with chickenpox and pertussis, but more likely to have been diagnosed with pneumonia, otitis media, allergies and NDD [neurodevelopmental disorders]. After adjustment, vaccination, male gender, and preterm birth remained significantly associated with NDD.

Specifically, vaccinated children were found to have a fourfold higher likelihood of having autism. I'm reminded of a quote by Dr. Daniel Neides of the Cleveland Clinic who wondered if we were making trade-offs that aren't worth it. He said, "Some of the vaccines have helped reduce the incidence of childhood communicable diseases [like chickenpox and pertussis from the study above]. That's great news. But not at the expense of neurologic diseases like autism and ADHD increasing at alarming rates."



Dr. Tony Mawson

Simultaneously, the Jackson State authors published a study in the same journal just looking at children born prematurely, titled “Preterm Birth, Vaccination and Neurodevelopmental Disorders: A Cross-Sectional Study of 6- to 12-Year-Old Vaccinated and Unvaccinated Children.” The results were disturbing, as the researchers found children born prematurely and vaccinated were fourteen times more likely to develop a neurodevelopmental disorder! The authors were appropriately concerned:

Preterm birth coupled with vaccination, however, was associated with a synergistic increase in the odds of NDD, suggesting the possibility that vaccination could precipitate adverse neurodevelopmental outcomes in preterm infants. These results provide clues to the epidemiology and causation of NDD but question the safety of current vaccination programs for preterm infants.

Given what you’ve learned so far, are you surprised this study wasn’t in the news? And, adding to this analysis of vaccinated versus unvaccinated children, ON May 27, 2020 Dr. Brian Hooker and Neil Miller did something very novel: they looked at medical records within pediatric practices, and they compared health outcomes by vaccination status. Titled, “Analysis of health outcomes in vaccinated and unvaccinated children: Developmental delays, asthma, ear infections and gastrointestinal disorders,” I’m sure their conclusion won’t surprise you:

Within this study, the number of vaccines received and vaccination status early in life are related to different acute and chronic conditions. The strongest relationships observed for vaccination status were for asthma, developmental delays and ear infections.

Table 4.

Vaccinated versus unvaccinated (during the first year of life), stratified based on medical practice, gender and year of birth (child ≥ 3 years of age).

Diagnosis	Vaccinated Cases/total	Unvaccinated Cases/total	Odds ratio (95% CI)	p-value
Developmental delay	153/1407 (10.9%)	34/630 (5.4%)	2.18 (1.47–3.24)	0.0001
Asthma	67/1412 (4.7%)	7/629 (1.1%)	4.49 (2.04–9.88)	0.0002
Ear infection	324/1116 (29.0%)	104/533 (19.5%)	2.13 (1.63–2.78)	<0.0001
Gastrointestinal disorder	55/1382 (4.0%)	18/619 (2.9%)	1.47 (0.84–2.57)	0.17
Head injury	93/1398 (6.7%)	31/627 (4.9%)	1.26 (0.82–1.94)	0.29

CI: confidence interval.

Finally, from Japan, this study in 2020 further supported the relationship between vaccines and asthma. Titled, “Cumulative inactivated vaccine exposure and allergy development among children: a birth cohort from Japan,” the study reached a very similar conclusion to the 2000 study from UCLA:

“...this large-scale birth cohort study demonstrated that the prevalence of asthma, wheeze and eczema in children at 12 months of age was associated with the administration of a larger number of types of inactivated vaccines at the initial immunisation before 6 months of age.”

Seven separate studies, all comparing a group of children vaccinated with a group of children unvaccinated, at least for a single vaccine. I'm guessing that for most readers this is the first time you've read about any of these studies. I think a fair question would be, “Why?” The answer is simple:

Studies that might hurt the financial performance of pharmaceutical companies are not publicized by media outlets that derive advertising revenue from the pharmaceutical companies.

Are We Being Lied To?

Well, has it been asked and answered? Have scientists proven that vaccines do not cause autism? If you read this blog post with your mind even open a little, I know you know the answer to that question is, “not even close.” When spokespeople for the vaccine industry (who often masquerade as concerned doctors or scientists) tell you the science has been done, and when they even get a bit exasperated that they are still answering this question, perhaps remember that this is all part of the Tobacco Playbook to distract, redirect, and delay. The science hasn't been done to “prove” vaccines don't cause autism. In fact, the biological science is getting done, and it paints vaccines in a very different light.

Author's note: this is an updated text from Chapter 4 of my book, *How to End the Autism Epidemic*.

J.B. Handley is the best-selling author of *How to End the*

Autism Epidemic. He graduated with honors from Stanford University, and currently serves as a Managing member of Bochi Investments, a private investment firm. Recently, he has written three articles about the lockdowns that have garnered over 5 million reads, Lockdown Lunacy 1.0, 2.0, and 3.0. He is also the co-producer of the documentary film Autism Yesterday and the co-founder of the Age of Autism blog. He can be reached at jbhandleyblog@gmail.com

Sign up for free news and updates from Children's Health Defense. CHD focuses on legal strategies to defend the health of our children and obtain justice for those injured. We can't do it without your support.

Republishing Guidelines